

Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3887
Arizona	201 East Indiana, Suite 200, Phoenix, AZ 85012
Colorado	2460 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97205.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Utah Water Supply Outlook

and

Federal - State - Private Cooperative Snow Surveys

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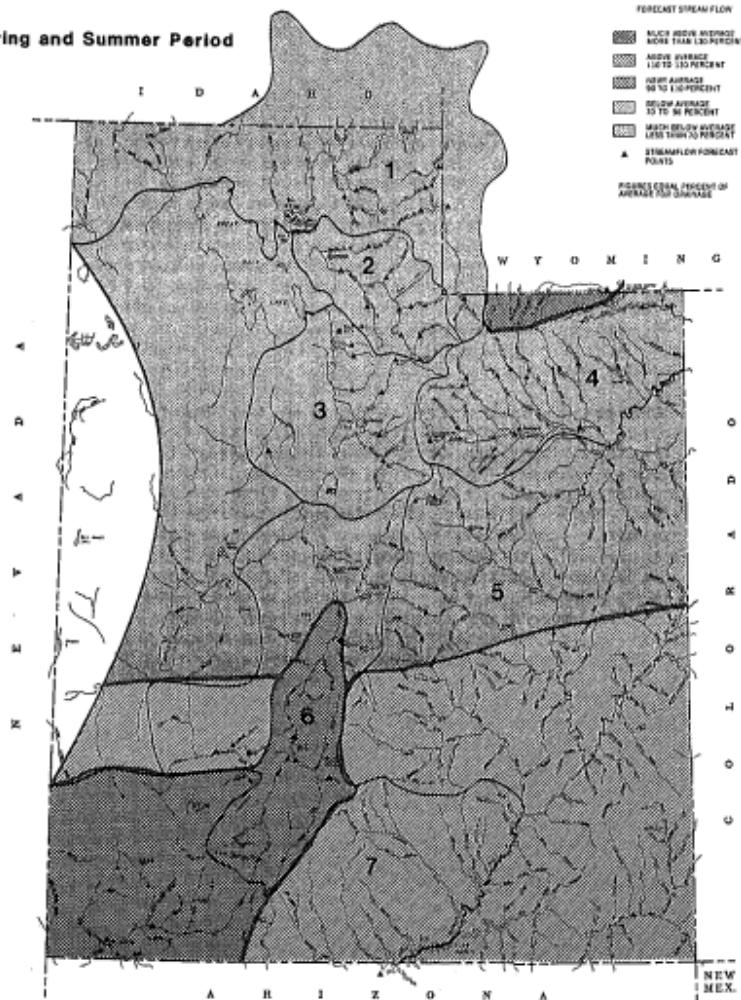
Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin.

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Streamflow Prospects for Utah

Spring and Summer Period



0 10 20 30 40 50 60 70 80 90 100
MILES
0 10 20 30 40 50 60 70 80 90 100
KILOMETERS

GENERAL OUTLOOK

SUMMARY

Another month of below average precipitation, coupled with an earlier than normal melt, have resulted in further reductions in streamflow forecasts in northern Utah. The timing of the precipitation in April enabled reservoir operations to delay releases and continue to fill for a few more weeks, however, thereby increasing much needed reserves for later this summer. The southern part of the State received ample precipitation during April and streamflow forecasts remain near average.

SNOWPACK

Changes in snow water content on the watersheds of Utah during April varied significantly from region to region. Northern Utah watersheds began to lose snow water to melt from two to three weeks earlier than usual and lost from two to more than three and one-half times as much water to melt during the month as usual. The Sevier River watershed, in contrast, began melt at the normal time and lost slightly less water to melt than normal and southwestern Utah actually recorded a net increase in water content for the month. May 1 snow water equivalent ranges from 34% of average on the Utah Lake, Jordan River and Tooele Valley watersheds to 88% in southwestern Utah.

PRECIPITATION

April precipitation at mountain stations in northern Utah was generally in the 80 to 90% of average range. Precipitation at northern Utah Valley stations, although erratic, generally ranged from 70 to 100% of average. Seasonal precipitation (October through April) at northern Utah mountain stations is generally 70 to 80% of normal and near 70% at valley sites. Precipitation during April at southern Utah mountain stations ranged from 90 to 180%. Many southern valley stations received more than two times normal April precipitation and, overall, averaged 177%. Seasonal precipitation at southern mountain sites ranges from 90 to 110% of average. Valley stations range from 70 to 130% seasonally.

RESERVOIRS

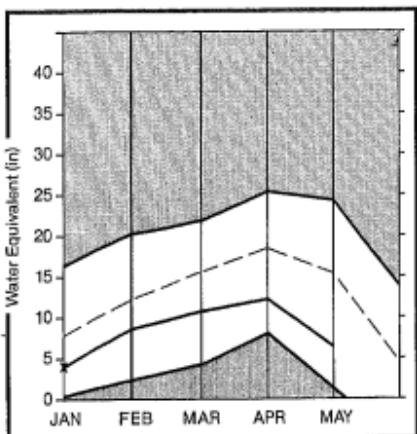
Reserves of water stored in 26 key irrigation reservoirs in Utah are 13% greater than normal for the end of April. This volume represents 86% of capacity. Last year these reservoirs held 88% of capacity in storage at the end of April. Normally the same reservoirs would only be storing 76% of capacity at this time of year. Sixteen of the 26 reservoirs in our sample have more than 90% of their useable capacity in storage. Pineview and the Enterprise Reservoirs will probably not fill this year and shortages will likely materialize. With continued spring precipitation releases could be delayed allowing East Canyon and Porcupine to fill.

STREAMFLOW

Forecasts of spring and summer streamflow on the Bear, Weber, and Provo-Utah Lake-Jordan have been reduced again this month as a result of continued below average monthly precipitation. Forecasts in these basins now range from 20 to 60% of average. Forecast flows on the north slope of the Uintas east of the Bear remain near average. South slope tributaries to the Duchesne have been reduced, however, and now range from 35 to 75% of average. Further south the situation improves with southeastern Utah forecasts in the 55 to 85% range. Forecasts on the Upper Beaver have improved slightly from last month and are near normal as are forecasts on the Virgin.

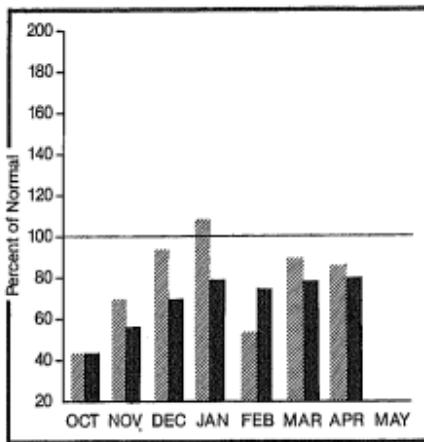
Bear River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum Average
Minimum Current

Monthly precipitation Year to date precipitation

WATER SUPPLY OUTLOOK:

Snowpack on the Bear River watershed began to melt almost two weeks earlier than usual this year and lost more than twice as much water content to melt during April than is normal. May first snow water content is 44% of average. Mountain precipitation was 86% of average for April which brings total water year accumulation to 78% of average. Streamflow forecasts have declined from last month and now range from 30 to 60% of average. Reservoir storage is slightly less than last year at 103% of average.

For more information contact your local
Soil Conservation Service Office:
Tremonton Field Office 801-267-5403
Logan Field Office 801-753-5616

BEAR RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR.	MOST	MOST	REAS.	REAS.	REAS.	REAS.
		AVG. (1000AF)	PROBABLE (1000AF)	PROBABLE (X AVG.)	MAX. (1000AF)	MAX. (X AVG.)	MIN. (1000AF)	MIN. (X AVG.)
BEAR RIVER near UT-WY Stateline	MAY-JUL	106.4	65.5	62	90.0	86	48.0	38
BEAR near Woodruff	MAY-JUL	136.0	45.0	30	125.0	98	21.0	17
WOODRUFF CREEK near Woodruff	MAY-JUL	15.1	4.7	21	8.0	52	2.0	13
BIG CREEK near Randolph	APR-JUL	6.3	1.5	28	4.0	75	1.0	19
BEAR RIVER near Randolph	MAY-JUL	16.0	29.0	31	73.0	77	15.0	16
SMITH FORK near Border	APR-SEP	123.0	46.0	36	125.0	102	20.0	16
THOMAS FORK near Stateline	APR-SEP	37.0	16.0	43	33.0	59	5.0	14
BEAR RIVER near Hixson	APR-SEP	310.0	138.0	48	256.0	93	60.0	19
CUB RIVER near Preston	APR-JUL	44.8	23.5	30	40.0	56	10.0	20
LITTLE BEAR RIVER near Paradise	MAY-JUN	29.0	9.0	32	20.0	49	6.0	21
LOGAN RIVER near Logan	MAY-JUL	107.0	61.0	48	70.0	65	32.0	30
BLACKSMITH FORK near Ryden	MAY-JUL	36.0	11.0	31	22.0	69	6.0	15

RESERVOIR STORAGE (1000AF)				WATERSHED SUMMARY ANALYSIS				
RESERVOIR	USEABLE CAPACITY	## USEABLE STORAGE ##	LAST YEAR AVG.	WATERSHED	NO. COURSES AVOID	THIS YEAR AS % OF LAST YR. AVERAGE		
	THRD	LAST YEAR				YEAR	AVG.	
BEAR LAKE	1421.0	1066.0	1116.1	1069.0	BEAR RIVER, UPPER IN UTAH	6	100	42
HYRIN	15.3	15.3	15.4	15.2	BEAR RIVER, LOWER IN UTAH	10	180	43
PORCUPINE	11.3	7.2	11.0	7.8	BEAR R. DRAINAGE IN UTAH	16	140	43
WOODRUFF KARROO	65.8	55.4	57.0	---	BEAR RIVER, UPPER	12	154	46
WOODRUFF CREEK	3.5	3.5	---	---	BEAR RIVER, LOWER	13	110	36
					BEAR RIVER DRAINAGE	23	164	44
					LOGAN RIVER	5	232	46
					RAFT RIVER	0	0	1
					BEAR RIVER BASIN	26	197	44

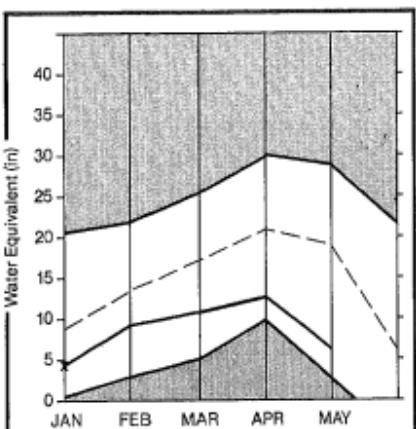
1 - Reas. max. and reas. min. forecasts are for 6X and 95% exceedance levels and also (X) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-66 base period.

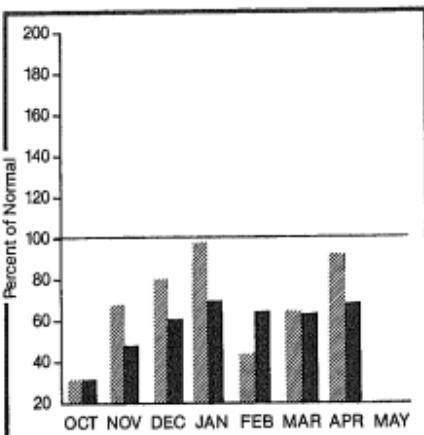
Weber & Ogden Watersheds

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum



Average



Minimum



Current



Monthly precipitation



Year to date precipitation



WATER SUPPLY OUTLOOK:

Snow water equivalent on the Weber River watershed is only 35% of normal. Peak accumulation was reached more than two weeks earlier than usual and melt during April was more than twice normal. Mountain precipitation during April continued the unbroken string of below average months of precipitation this water year with 92% of average. Water year total precipitation is 68% of normal. Streamflow forecasts now range from 20 to 51% of average. Reservoirs are holding 80% of capacity but Pineview is only 52%.

For more information contact your local
Soil Conservation Service Office:
Layton Sub Office 801-544-9144

HEBER & OGDEN WATERSHEDS In Utah

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR.		90% PROBABLE		99% PROBABLE		REAS. MAX.		REAS. AVG.		REAS. MIN.	
		AVG.	(1000cfs)	AVG.	(1000cfs)	MAX.	(1000cfs)	AVG.	(1000cfs)	MIN.	(1000cfs)	AVG.	(1000cfs)
SMITH AND MOORHOUSE CREEK near Oakley	MAY-JUN	27.7	15.3	47		38.0	65	9.0	32				
WEBER RIVER near Oakley	MAY-JUN	93.0	46.2	69		85.0	69	25.0	27				
ROOKPORT RESERVOIR Inflow	MAY-JUN	102.0	24.0	35		80.0	49	14.0	14				
CHALK CREEK near Coalville	MAY-JUN	94.0	4.8	29		17.0	50	4.0	12				
WEBER RIVER near Coalville	MAY-JUN	105.0	25.0	34		48.0	47	16.0	14				
ECHO RESERVOIR Inflow	MAY-JUN	120.0	27.0	21		56.0	44	14.0	11				
LOST CREEK near Croydon	MAY-JUN	11.2	9.1	20		6.0	64	2.0	18				
EAST CANYON CREEK near Morgan	MAY-JUN	19.0	4.0	24		12.0	63	2.0	11				
HARDSCRABBLE CREEK near Parleysville	APR-JUN	18.4	9.0	51		16.0	87	6.0	27				
WEBER RIVER at Gettysburg	APR-JUN	325.0	84.0	26		146.0	46	44.0	19				
SOUTH FORK OGDEN RIVER near Huntsville	MAY-JUN	45.0	9.0	21		21.0	49	6.0	12				
PINEVIEW RESERVOIR Inflow	MAY-JUN	74.0	21.0	28		36.0	49	12.0	16				
WHEELER CREEK near Huntsville	APR-JUN	4.1	2.0	37		4.0	64	1.0	16				
FARMINGTON CREEK near Farmington	MAY-JUL	4.7	2.0	30		5.0	75	1.0	18				

RESERVOIR	RESERVOIR STORAGE			WATERSHED	WATERSHED SNOWPACK ANALYSIS			
	CAPACITY	USABLE			NO. COURSES	THIS YEAR AS % OF		
		YEAR	THDE	LAST	AVG'	AVG'D	LAST YR. AVERAGE	
CAUSEY	7.1	5.8	7.1	2.8	ODGEN RIVER	4	118	37
EAST CANYON	48.1	46.3	44.0	41.8	WEBER RIVER	16	99	34
ECHO	73.9	67.3	70.7	74.2	WEBER & OGDEN WATERSHED	20	104	36
LOST CREEK	20.0	19.4	19.2	14.0				
PINEVIEW	110.1	87.8	87.7	76.4				
ROOKPORT	60.9	41.0	45.1	34.0				
HILLARD BAY	165.5	155.3	142.1	129.7				

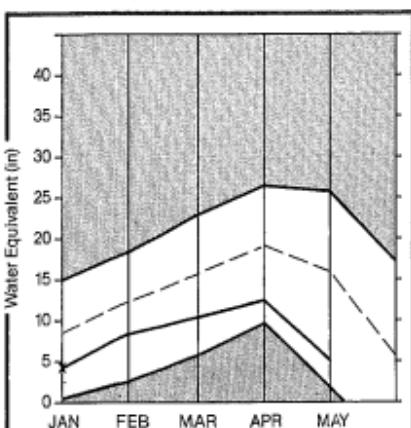
1 - Reas. max. and reas. min. forecasts are for 50 and 90% exceedence levels and sites (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-95 base period.

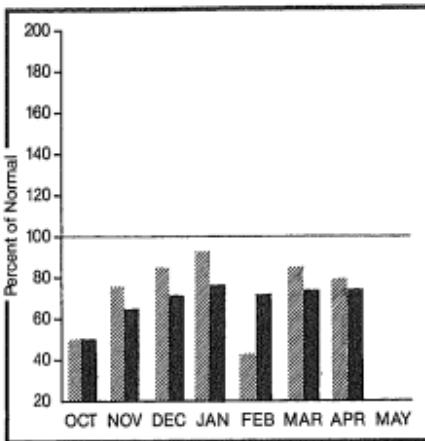
Utah Lake, Jordan River & Tooele Valley

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum Average

Minimum Current

Monthly precipitation Year-to-date precipitation

WATER SUPPLY OUTLOOK:

Loss of snow water to melt on Jordan River and Tooele Valley tributaries began approximately two weeks earlier than usual this year and progressed at more than twice the normal rate resulting in May first water content of only 34% of average. Precipitation at mountain stations was only 78% of average in April. Seasonal precipitation is 74% of average. Forecasts of spring and summer streamflow now range from 38 to 65% of average. Area reservoirs have 97% of their cumulative capacity currently in storage.

For more information contact your local
Soil Conservation Service Office:
Midvale Field Office 801-524-4373
Provo Field Office 801-377-5580

UTAH LAKE, JORDAN RIVER & TOOLE VALLEY

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR.		500 YR.		REAS. MAX.		REAS. MIN.		REAS. AVERAGE	
		AVG.	PROBABLE	PROBABLE	MAX.	MAX.	MIN.	MIN.	MIN.	AVG.	AVG.
SALT CREEK near Nephi	MAY-JUL	10.4	4.1	36	10.0	93	2.0	19			
PAISON CREEK near Payson	MAY-JUL	5.8	2.3	43							
HOBBLE CREEK near Springville	MAY-JUL	56.8	7.0	42							
PROVO near Hollister	MAY-JUL	300.0	50.0	56	70.0	70	35.0	25			
PROVO below Deer Creek Dam	MAY-JUL	306.0	50.0	46	75.0	67	25.0	23			
AMERICAN FORK near American Pk.	MAY-JUL	30.0	14.0	47	18.0	40	11.0	37			
UTAH LAKE Inflow	MAY-JUL	211.0	100.0	92	175.0	93	45.0	21			
LITTLE COTTONWOOD CRK near SLC	MAY-JUL	38.0	18.0	47	21.0	68	16.0	42			
BIG COTTONWOOD CRK near SLC	MAY-JUL	38.0	18.0	31	21.0	60	14.0	40			
PARLEY'S CREEK near SLC	MAY-JUL	19.0	5.8	40	9.0	47	2.0	18			
HILL CREEK near SLC	MAY-JUL	6.9	3.0	51	4.0	68	2.0	34			
EMIGRATION CREEK near SLC	MAY-JUL	3.2	1.1	38							
CITY CREEK near SLC	MAY-JUL	7.0	3.0	38	4.0	51	2.0	26			
VERNON CREEK near Vernon	MAY-JUN	0.8	0.4	55	0.4	101	0.2	25			
BETTLEMENT CREEK near Tooele	MAY-JUL	2.1	0.9	43	2.0	98	0.6	24			
SOUTH MOLLOW CREEK near Grantsville	MAY-JUL	2.7	1.1	41	2.0	74	0.6	22			

RESERVOIR STORAGE (1000AF)				WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	# USEABLE THER. LAST	# USEABLE LAST	WATERSHED	NO. COURSES	THIS YEAR AS % OF	THIS YEAR AS % OF
	1 YEAR	1 YEAR	AVG.		KNO'D	LAST YR.	AVERAGE
DEER CREEK	149.6	187.0	146.1	PROVO RIVER & UTAH LAKE	10	19	31
GRANTVILLE	3.3	3.1	3.2	---	5	11	23
BETTLEMENT CREEK	1.0	1.0	0.8	---	12	14	34
STRAWBERRY-ENLARGED	951.4	492.6	657.6	---	4	100	30
UTAH LAKE	955.5	930.7	849.8	TOOLE & VERNON N.B. '8	26	182	94
VERNON CREEK	0.6	0.6	0.4	UTAH L.-JORDAN R.-TOOLE	26	182	94

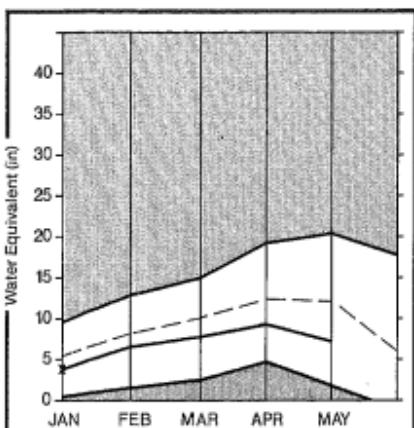
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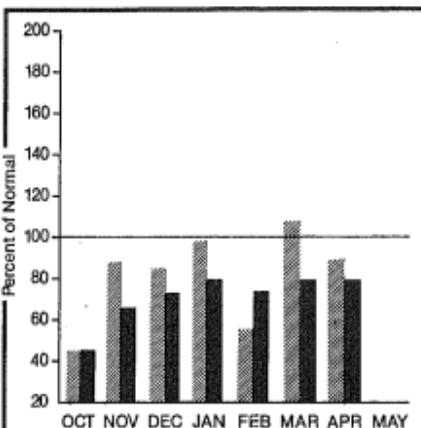
The average is computed for the 1961-88 base period.

Uintah Basin & Dagget SCD's

Mountain snowpack* (inches)



Precipitation* (percent of normal)



*Based on selected stations

*Based on selected stations

Maximum Average

Monthly precipitation Year-to-date precipitation

Minimum Current

WATER SUPPLY OUTLOOK:

Snowmelt commenced from one to three weeks earlier than usual on Uinta Mountain watersheds that drain into the Colorado River basin. During April more than three and one-half times normal amounts of snow water were lost to melt. May first snowpack ranges from 10 to 81% of average. Mountain precipitation was 89% of the April average bringing seasonal totals to 78%. Forecasts range for 34 to 102% of average streamflow. Reservoir storage is currently 142% of average and 94% of capacity.

For more information contact your local
Soil Conservation Service Office:
Roosevelt Field Office 801-722-4621

WINTAH BASIN & DABBIT SCD'S

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR.	MOST PROBABLE	MOST PROBABLE	PEAK, MAX.	PEAK, MAX.	PEAK, MIN.	PEAK, MIN.
		AVG. (1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)
BLACK'S FORK near Millburn	APR-JUL	90.0	80.0	80	905.0	117	60.0	67
HENRY'S FORK near Manila	APR-SEP	81.0	82.0	100	65.0	127	40.0	79
PLANTING GORGE RESERVOIR Inflow	APR-JUL	1267.0	880.0	67	1090.0	65	645.0	51
	MAY-JUL	1076.0	725.0	64	920.0	54	550.0	50
ASHLEY CREEK near Vernal	MAY-JUL	80.0	30.0	60	40.0	80	20.0	40
NEST FORK DUCHESSNE RIVER near Hanna	APR-JUL	28.0	11.0	55	20.0	71	11.0	39
DUCHESSNE RIVER near Tolson	MAY-JUL	96.0	44.0	46	59.0	60	34.0	35
ROCK CREEK near Mountain Home	MAY-JUL	96.0	52.0	55	66.0	73	41.0	46
DUCHESSNE RIVER near Duchesne	APR-JUL	109.0	105.0	94	130.0	49	80.0	42
	MAY-JUL	175.0	80.0	47	110.0	63	60.0	34
CURRENT CREEK near Freeland	MAY-JUL	14.0	8.0	48	11.0	66	6.0	36
STRAWBERRY RESERVOIR Inflow	APR-JUL	40.0	27.0	48	26.0	63	16.0	27
	MAY-JUL	36.0	17.0	34	27.0	64	8.0	16
STRAWBERRY RIVER at Duchesne	APR-JUL	45.0	32.0	46	42.0	61	23.0	33
LAKEFORK RIVER near Mountain Home	MAY-JUL	47.0	31.0	76	42.0	55	41.0	61
YELLOWSTONE RIVER near Altonah	MAY-JUL	42.0	44.0	71	61.0	55	27.0	44
DUCHESSNE near Nyssa	MAY-JUL	186.0	85.0	44	130.0	70	26.0	14
WINTAH RIVER near Neola	MAY-JUL	64.0	41.0	75	93.0	111	29.0	35
WHITE ROCKS RIVER near Whiterrick	MAY-JUL	87.0	40.0	70	67.0	100	23.0	40
DUCHESSNE near Randlett	APR-JUL	207.0	195.0	93	200.0	78	40.0	56
	MAY-JUL	230.0	190.0	46	220.0	95	65.0	24

RESERVOIR	RESERVOIR STORAGE			WATERSHED	WATERSHED STREAMFLOW ANALYSIS		
	USEABLE CAPACITY	** USEABLE STORAGE **	LAST YEAR	THIS YEAR AVE.	NO. COURSES	THIS YEAR AS % OF	AVG'D LAST YR. AVERAGE
PLANTING GORGE	3749.0	3070.0	3136.7	---	UPPER GREEN RIVER in UTAH	33	70 64
MOON LAKE	31.0	23.0	27.4	30.1	ASHLEY CREEK	2	40 18
RED FLEET	24.0	22.0	20.0	20.0	BLACK'S FORK RIVER	3	40 80
STEINHAUER	33.0	32.0	31.3	23.0	SNIP CREEK	2	69 19
STARVATION	162.0	144.0	149.0	110.0	DUCHESSNE RIVER	16	77 50
STRAWBERRY-EMLENSED	951.4	475.0	550.0	---	LAKEFORK-YELLOWSTONE CR.	3	63 50
					STRAWBERRY RIVER	4	233 40
					WINTAH-WHITEROCKS RIVERS	4	17 52
					WINTAH RIVER & DABBIT SCD	29	94 54

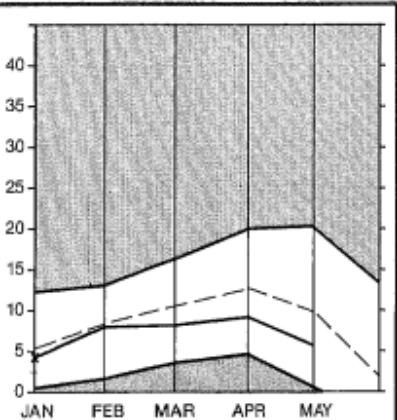
1 - Recs, max., and max. min. forecasts are for 25 and 50% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-90 base period.

Carbon, Emery, Wayne, Grand, and San Juan Co.

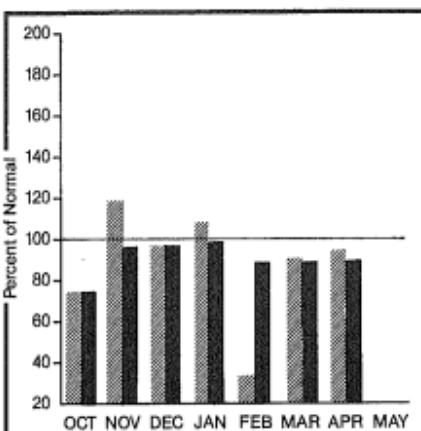
Mountain snowpack* (inches)



Based on selected stations

Minimum [Shaded Box]
Average [Dotted Box]
Current [Solid Line]

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [Shaded Box]
Year-to-date precipitation [Solid Box]

WATER SUPPLY OUTLOOK:

The watersheds of southeastern Utah began to lose snow water to melt about two weeks earlier than usual this year but the amount lost in April was only slightly in excess of normal. May first snow water content is 60% of average. April precipitation at mountain stations was near normal bringing water year accumulation to 89% of average. Forecasts of spring and summer streamflow range from 55 to 65% of normal. Stored water reserves were 13% greater than usual at the end of April.

For more information contact your local
Soil Conservation Service Office:
Price Field Office 801-637-0041

CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR.	50% PROBABLE	50% PEAK	REAS. (1000AF)	REAS. (X KWS.)	REAS. (1000AF)	REAS. (X KWS.)	REAS. (1000AF)	REAS. (X AVG.)
		AVG. (1000AF)	(1000AF)	(X KWS.)	MAX. (1000AF)	MAX. (X KWS.)	MIN. (1000AF)	MIN. (X KWS.)	MAX. (1000AF)	MIN. (1000AF)
COLORADO near Cisco, UT	MAY-JUL	3448.0	2700.0	78	3525.0	102	1975.0	57		
	MAY-JUL	2959.0	2340.0	78	3045.0	102	1695.0	57		
HILL CREEK near Moab	MAY-JUL	4.7	4.0	88	5.0	106	3.0	64		
GREEN near Green Rv., UT	MAY-JUL	3182.0	2490.0	77	3255.0	96	1845.0	58		
	MAY-JUL	2899.0	2340.0	79	2955.0	98	1545.0	59		
GOOSEBERRY CREEK near Ecorefield	MAY-JUL	11.1	7.4	67	10.0	99	5.0	46		
SCOFIELD RESERVOIR Inflow	MAY-JUL	41.8	23.0	88	36.0	72	18.0	43		
PRICE near Helmar	MAY-JUL	75.1	43.0	63						
ELECTRIC LAKE Inflow	MAY-JUL	12.5	9.0	61	11.0	79	7.0	50		
HUNTINGTON CREEK near Huntington	MAY-JUL	46.7	35.0	41	40.0	82	25.0	51		
COTTONWOOD CREEK near Draytonville	MAY-JUL	43.0	24.0	60	40.0	93	15.0	35		
FERRON CREEK near Ferron	MAY-JUL	36.1	22.0	88	30.0	79	15.0	39		
SEVEN MILE CREEK near Fish Lake	MAY-JUL	6.1	5.4	83	7.0	106	4.0	62		
MUDY CREEK near Emery	MAY-JUL	21.0	12.0	87	16.0	78	8.0	38		
NAVAJO RESERVOIR Inflow	MAY-JUL	406.0	439.0	72	410.0	101	295.0	49		
SAN JUAN near Bluff, UT	MAY-JUL	871.0	696.0	80	905.0	111	475.0	55		

RESERVOIR	RESERVOIR STORAGE			WATERSHED	WATERSHED SWIMMING ANALYSIS		
	USEABLE CAPACITY	** USEABLE STORAGE **	1 YR	THIS LAST	NO. COURSES	THIS YEAR AS % OF	
	1	YEAR	YEAR	AVG'D	LAST YR.	AVERAGE	
HUNTINGTON NORTH	3.9	4.2	4.1	3.9	PRICE RIVER	3	292 56
JOE'S VALLEY	61.6	44.9	49.2	46.8	EMI RAPID RIVER	7	104 46
KEN'S LAKE	2.3	1.4	1.0	---	MUDY RIVER	2	365 63
HILL SITE	16.7	9.4	14.8	6.3	FREMONT RIVER	4	96 50
SCOFIELD	65.8	47.7	37.9	36.6	LASAL MOUNTAINS	2	42 19
					BLUE MOUNTAINS	2	36 24
					MUDY CREEK - WHITE RIVE	3	136 16
					SOUTHEASTERN UTAH	22	113 60

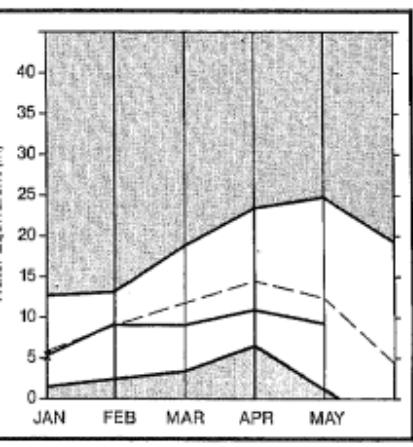
1 - Reas. max. and reas. min. forecasts are for 50 and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

Sevier & Beaver River Basins

Mountain snowpack* (inches)

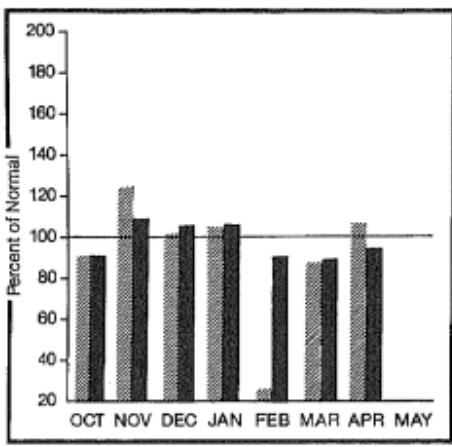


Based on selected stations

maximum [hatched bar]
minimum [light gray bar]

Average [dashed line]
Current [solid line]

Precipitation* (percent of normal)



Based on selected stations

Monthly precipitation [hatched bar]
Year-to-date precipitation [solid bar]

WATER SUPPLY OUTLOOK:

Snowpack on Sevier River watershed began to melt at the normal time this April but the amount of water lost to melt was less than average because of low temperatures and above average precipitation the last half of the month. May first snow water content is 73% of normal. April precipitation was 106% of average. Water year total is 92% of normal. Streamflow forecasts range from 43 to 110% of average and generally increase from north to south. Reservoir storage is very good. Storage is 158% of average (97% of capacity).

For more information contact your local
Soil Conservation Service Office:
Richfield Field Office 801-896-6261
Fillmore Field Office 801-743-6655

SEVIER & BEAVER RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR.	MOST	MOST	REAS.	REAS.	REAS.	REAS.
		AVG.	PROBABLE	PROBABLE	MAX.	MAX.	MIN.	MIN.
		(1000MF)	(1000MF)	(X AVG.)	(1000MF)	(X AVG.)	(1000MF)	(X AVG.)
SEVIER at Hatch	MAY-JUL	44.9	46.0	102	46.0	134	35.9	78
SEVIER near Circleville	MAY-JUL	36.2	40.0	110				
SEVIER near Kingston	MAY-JUL	23.7	28.0	109	45.0	176	15.0	66
ANTHONY CREEK near Anthony	MAY-JUL	6.7	7.2	154				
E F SEVIER near Kingston	MAY-JUL	16.4	18.0	110	25.0	171	11.0	67
SEVIER b/w Plate Gap	MAY-JUL	42.3	49.0	114	76.0	186	23.0	55
CLEAR CREEK near Sevier	MAY-JUL	18.3	19.0	97				
SCOUR to GUNNISON	MAY-JUL	36.4	36.0	97	70.0	192	16.0	41
KINGSTON to VERNILLION DAM	MAY-JUN	32.7	35.0	92				
VERNILLION DAM to GUNNISON	MAY-JUN	56.2	54.0	106				
MAY-JUL	36.2	36.0	100					
SALINA CREEK at Salina	MAY-JUN	16.2	15.0	49				
PLEASANT CREEK near Pleasant	MAY-JUL	11.4	11.0	43				
EPHRASIN CREEK near Ephrasis	MAY-JUL	22.0	16.0	40				
SEVIER at Sunnison	MAY-JUL	79.0	70.0	98				
CHICKEN CREEK near Lavan	APR-JUL	3.6	3.0	64	3.0	86	1.0	29
OAK CREEK near Oak City	MAY-JUL	1.1	0.6	40	1.0	91	0.3	27
CHALK CREEK near Fillmore	MAY-JUL	18.2	9.0	70	12.0	91	6.0	48
BEAVER RIVER near Sevier	MAY-JUL	24.0	18.0	78	26.0	100	10.0	42
NORTH CREEK near Sevier (combined)	MAY-JUL	12.7	10.0	93	19.0	142	3.0	24
MINERVILLE RESERVOIR Inflow	APR-JUN	46.9	6.7	71	39.0	112	3.0	34

RESERVOIR	RESERVOIR STORAGE (1000MF)			WATERSHED BONPACK ANALYSIS
	USEABLE CAPACITY	# USEABLE STORAGE #	NO. COURSES	
	THIS YEAR	LAST YEAR	AVG.	AVG/10 LAST YR. AVERAGE
GUNNISON	20.3	20.2	20.0	14.9
MINERVILLE (RIVF6)	26.0	25.9	24.8	14.6
OTTER CREEK	92.7	92.7	92.6	97.6
PLATE	71.8	71.1	69.0	94.7
BEAVER BRIDGE	234.0	227.4	211.1	186.0
PANGUITCH LAKE	22.0	21.0	20.0	—

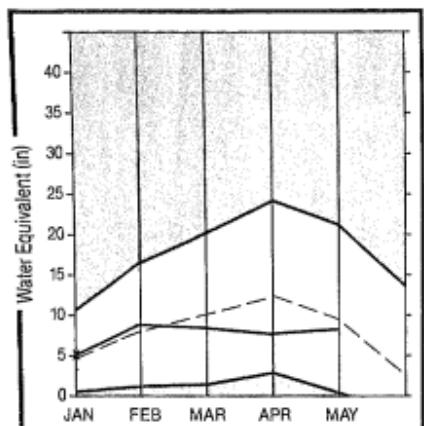
1 - Reas. max. andreas. min. Forecasts are for 5% and 95% exceedance levels and sites (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1951-65 base period.

E. Garfield, Kane, Washington, & Iron Co.

Mountain snowpack* (inches)



*Based on selected stations

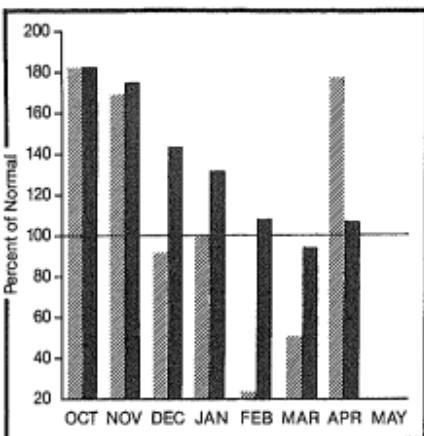
Maximum

Average

Minimum

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year-to-date precipitation

WATER SUPPLY OUTLOOKs

Normally the watersheds in southwestern Utah lose about three inches of snow water content in April. This April an increase of six-tenths of an inch was recorded, reversing the melt trend that began in February and bringing May first snow water to 88% of average. Mountain precipitation was abundant at most stations. April precipitation was 177% of average. Water year precipitation is 107% of average. Local flows are forecast above average. Reservoir storage is near capacity except at Enterprise (30% of cap.).

For more information contact your local
Soil Conservation Service Office:
Cedar City Field Office 801-586-2429

E. BARFIELD, KANE, WASHINGTON, & IRW Co.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST		25 YR.	HIST.	HIST.	REB.	REB.	REB.	REB.
	PERIOD	AVG.	(1000AF)	(1000AF)	(5 AVE.)	(1000MF)	(5 AVE.)	(1000MF)	(5 AVE.)
LAKE POWELL Inflow	APR-JUL	6046.0	4300.0	78	6850.0	101	4600.0	87	
	MAY-JUL	7039.0	6300.0	73	6820.0	96	3820.0	54	
VIRGIN near Hurricane	MAY-JUN	43.8	60.8	114	70.0	160	35.0	68	
SHANTA CLOTH near Pine Valley	MAY-JUN	4.0	4.5	113					
COAL CREEK near Cedar City	MAY-JUL	16.0	18.0	107	25.0	149	15.0	89	

RESERVOIR STORAGE (1000AF)

WATERSHED BACKPACK ANALYSIS

RESERVOIR	USEABLE STORAGE				WATERSHED	NO. COURSES	THIS YEAR AS % OF	
	USEABLE CAPACITY	THIS YEAR	LAST YEAR	AVE.				
GUNLOCK	10.4	10.8	7.0	---	VIRGIN RIVER	6	148	87
LAKE POWELL	25002.0	0.0	0.0	---	FARONAH	4	144	98
QUAIL CREEK	40.0	39.0	32.0	---	ENTERPRISE TO NEW HARBOR	2	0	0
UPPER ENTERPRISE	30.0	2.0	0.0	---	COAL CREEK	3	123	90
LOWER ENTERPRISE	2.6	1.0	0.4	---	ECALANTE RIVER	2	44	80
					SOUTHWESTERN UTAH	12	143	90

1 - Reb., max., and reb., min. forecasts are for 5% and 95% exceedance levels and sites (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-80 base period.

SNOW MEASUREMENT DATA

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
ALTA CENTRAL	8800	5/04	43	19.5	11.3	40.3
ASHLEY TWIN LAKES	10500	5/03	28	6.2	11.1	18.0
ATWOOD LAKE	10500	5/03	20	5.8	8.6	13.3
BEAVER CREEK DIVIDE	8200	4/27	0	0.0	0.0	6.5
BEAVER DAMS	8000	4/26	0	0.0	0.0	8.0
BEN LOMOND PEAK	8000	4/28	40	16.6	18.4	39.4
BEN LOMOND TRAIL	6000	4/28	0	0.0	0.0	9.6
BEVAN'S CABIN	6450	4/29	0	0.0	0.0	5.5
BIG FLAT	10290	4/26	61	19.6	14.9	21.6
BIRCH CROSSING	8100	4/25	0	0.0	0.0	2.0
BLACK'S FLAT-U.M. CK	9400	4/26	20	6.3	3.5	9.4
BLACK'S FORK	9200	4/26	-	9.0E	0.0	11.9
BLACK'S FORK GS-EF	9340	4/27	25	7.7	6.8	9.9
BLACK'S FORK JUNCTN	8930	4/27	19	5.4	2.7	8.3
BOX CREEK	9300	4/26	37	11.8	6.2	19.2
BRIAN HEAD	10000	4/25	69	23.8	20.0	22.0
BRIGHTON	8750	5/04	31	12.9	11.8	40.2
BRIGHTON CABIN	8700	5/04	19	8.9	6.7	25.5
BROWN DUCK RIDGE	10600	4/27	45	12.5	19.0	22.4
BRYCE CANYON	8000	4/28	0	0.0	0.0	0.6
BUCK FLAT	9800	4/26	34	11.8	9.6	17.2
BUCK PASTURE	9700	5/03	42	19.0	9.2	17.2
BUCKBOARD FLAT	9000	4/28	9	3.4	8.0	8.3
BUG LAKE	7950	4/28	26	9.9	8.0	19.4
BURT'S-MILLER RANCH	7900	4/27	0	0.0	0.0	2.4
CAMP JACKSON	8600	4/28	1	0.4	3.0	7.5
CASTLE VALLEY	9500	4/25	24	8.0	5.9	8.5
CHALK CREEK #1	9100	4/27	39	13.2	15.2	25.0
CHALK CREEK #2	8200	4/27	20	6.1	6.6	14.4
CHALK CREEK #3	7500	4/27	0	0.0	0.0	3.1
CHEPETA	10300	4/27	16	4.2	10.1	13.9
CHEPETA-WHITERKS. LK	10350	5/03	39	11.7	13.5	15.7
CITY CREEK	7500	5/03	9	4.2	0.0	23.2
CLEAR CREEK MEADOWS	9420				-	20.6
CLEAR CREEK RIDGE #1	9200	4/27	24	9.7	6.1	18.0
CLEAR CREEK RIDGE #2	8000	4/27	15	5.3	2.9	10.8
CLEAR CREEK RIDGE #3	8600	4/27	0	0.0	0.0	0.1
CURRENT CREEK	8000	4/27	0	0.0	0.0	2.8
DANIELS-STRAWBERRY	8000	4/27	1	0.3	0.0	9.9
DESERET PEAK	9250	4/29	27	9.8	-	26.9
DILL'S CAMP	9200	4/26	14	4.5	3.8	9.4
DONKEY RESERVOIR	9800	4/26	12	3.2	8.1	5.5
DRY BREAD POND	8350	4/28	13	5.1	1.0	18.2
DUCK CREEK R.S.	8700	4/25	-	2.1E	0.0	9.2
EAST SHINGLE LAKE	9800	5/03	51	15.8	12.2	28.9
EAST WILLOW CREEK	8250	5/01	-	0.0E	1.0	7.2
FARMINGTON CANYON	8000	4/28	26	11.0	17.1	33.7
FARMINGTON CANYON L.	6950	4/28	16	6.1	10.4	23.7
FARNSWORTH LAKE	9600	4/26	57	21.1	19.9	22.9

SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
FISH LAKE	8700	4/26	10	3.2	1.7	5.9
FIVE POINT LAKE	11000	5/03	36	10.8	13.1	18.4
FRANCES FLATS	6700	5/03	0	0.0	0.0	0.7
G.B.R.C. HEADQUARTER	8700	4/26	33	11.9	10.9	17.6
G.B.R.C. MEADOWS	10000	4/26	58	20.0	19.4	27.2
GARDEN CITY SUMMIT	7600	4/26	19	7.5	4.2	17.2
GEORGE CREEK	8840				-	-
GOOSEBERRY R.S.	8000	4/26	17	6.3	5.4	10.0
HARDSCRABBLE	6700	4/28	0	0.0	0.0	11.1
HARRIS FLAT	7700	4/25	3	1.2	0.0	2.9
HAYDEN FORK	9400	4/27	21	8.1	8.5	16.1
HENRY'S FORK	10000	5/03	34	10.9	11.2	13.4
HEWINTA G.S.	9500	4/27	25	8.7	7.1	10.2
HIDDEN SPRINGS	5500	5/03	0	0.0	0.0	0.4
HOLE-IN-THE-ROCK	9150	4/27	13	3.5	4.0	6.0
HOLE-IN-THE-ROCK GS	8300				-	0.0
HICKERSON PARK	9100	4/27	19	6.3	6.0	6.5
HOBBLE CREEK SUMMIT	7420	4/27	0	0.0	0.0	8.3
HORSE RIDGE	8250	4/28	11	4.0	2.9	20.0
HUNTINGTON-HORSESHOE	9800	4/26	55	20.8	16.1	27.4
INDIAN CANYON	9100	4/27	19	6.2	7.2	10.9
JOHNSON VALLEY	8850	4/26	0	0.0	0.0	4.6
KILFOIL CREEK	7300	4/28	5	1.6	5.6	10.7
KILLYON CANYON	6300	5/03	0	0.0	0.0	0.0
KIMBERLY MINE (UPPER)	9300	4/26	36	13.9	13.4	17.2
KING'S CABIN (UPPER)	8730	4/28	3	0.8	4.0	9.8
KLONDIKE NARROWS	7400	4/26	9	3.7	0.0	15.8
KOLOB-CRYSTAL	9250	4/25	58	20.2	11.6	21.6
LAKEFORK BASIN	11100	5/03	45	12.6	15.0	22.4
LAKEFORK MOUNTAIN #1	10200	4/27	19	5.7	10.1	12.1
LAKEFORK MOUNTAIN #3	8400	4/27	0	0.0	0.0	2.0
LAMBS CANYON	7400	4/27	7	2.5	0.0	11.0
LASAL MOUNTAIN LOWER	8800	4/29	1	0.6	4.4	5.3
LASAL MOUNTAIN (UPP)	9850	4/29	33	13.0	17.6	14.4
LIGHTNING LAKE	10500	5/03	48	13.4	21.0	25.8
LILY LAKE	9050	4/27	17	4.6	5.6	14.2
LITTLE BEAR (LOWER)	6000	4/28	0	0.0	0.0	1.9
LITTLE BEAR (UPPER)	6550	4/28	0	0.0	0.0	5.6
LITTLE GRASSY CREEK	6100	4/25	0	0.0	0.0	0.1
LONG FLAT	8000	4/25	0	0.0	0.0	2.0
LONG VALLEY JCT.	7500	4/25	2	0.7	0.0	0.0
LOST CREEK RESERVOIR	6130	4/28	0	0.0	0.0	0.0
MAMMOTH-COTTONWOOD	8800	4/26	32	13.2	6.9	20.9
MERCHANT VALLEY (UP)	8750	4/26	22	6.8	2.7	7.9
MIDDLE BEAVER CREEK	8650				-	4.0
MIDDLE CANYON	7000	4/29	0	0.0	0.0	10.0
MIDWAY VALLEY	9800	4/25	68	23.0	18.4	24.1
MILL CREEK	6950	4/28	26	10.0	8.6	20.6
MILL D SOUTH FORK	7400	4/27	8	2.8	0.0	15.4

SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
MONTE CRISTO R.S.	8960	4/28	32	12.9	9.8	26.5
MOSBY MOUNTAIN (LOW)	9500	4/28	16	4.0	7.5	10.5
MT. BALDY R.S.	9500	4/26	58	20.9	16.6	26.2
MUD CREEK #2	8600	4/26	14	4.8	2.6	8.9
OAK CREEK	7760	4/25	19	8.0	2.8	9.5
ONE MILE SUMMIT	7330				-	0.0
OTTER LAKE	9600	4/28	36	11.9	8.9	14.5
PANQUITCH LAKE	8200	4/25	2	0.5	0.0	1.3
PARADISE PARK	10100	4/28	25	9.0	12.0	15.2
PARLEY'S CANYON SUM.	7500	4/28	11	3.7	1.6	14.2
PAYSON R.S.	8050	4/27	18	7.2	8.2	16.3
PICKLE KEG SPRING	9800	4/26	29	11.9	9.4	15.8
PINE CANYON	8000	4/28	7	1.6	2.6	14.8
PINE CREEK	8800	4/25	32	13.0	8.7	15.5
REDDEN MINE LOWER	8500	4/27	25	9.5	4.2	17.9
RED PINE RIDGE	9200	4/26	30	11.4	7.6	15.9
REES'S FLAT	7300	4/25	8	2.7	0.1	11.0
REYNOLDS PARK	10400	5/03	43	12.9	12.2	18.0
ROCK CREEK	7900	4/27	0	0.0	0.0	1.4
ROCKY BASIN-SETTLEMENT	8900	4/29	40	15.2	14.1	30.0
SEELEY CREEK R.S.	10000	4/26	45	15.5	15.3	19.0
SERGEANT LAKES	8300	5/03	19	5.7	0.0	11.7
SHINGLE MILL	6200	4/28	0	0.0	0.0	3.3
SILVER LAKE(BRIGHT.)	8730	4/27	32	14.2	10.8	28.2
SMITH & MOREHOUSE	7800	4/27	3	0.8	0.3	9.2
SNOWBIRD GAD VALLEY	9700				30.2	40.0
SOAPSTONE R.S.	7800	4/27	-	0.0E	0.0	7.2
SPIRIT LAKE	10300	4/27	29	9.2	16.4	15.9
SQUAW SPRINGS	9300	4/26	0	0.0	0.0	4.9
STEEL CREEK PARK	10100	4/27	51	17.0	16.6	19.0
STILLWATER CAMP	8550	4/27	6	1.8	2.1	8.4
STRAWBERRY DIVIDE	8400	4/29	20	8.8	0.0	14.9
STUART R.S.	7950	4/26	0	0.0	0.0	2.3
SUSC RANCH	8200	4/27	0	0.0	0.0	2.7
TALL POLES	8800	4/25	35	11.7	4.9	12.7
THAYNES CANYON	9200				-	-
THISTLE FLAT	8500				-	17.5
TIMPANOGOS DIVIDE	8140	4/27	12	4.5	5.1	23.0
TONY GROVE LAKE	8400	4/28	47	21.3	9.1	35.8
TONY GROVE R.S.	6250	4/28	0	0.0	0.0	3.8
TRIAL LAKE	9960	4/27	41	12.3	13.7	26.6
TROUT CREEK	9400	4/28	12	2.8	5.1	10.1
UPPER JOES VALLEY	8900	4/28	7	1.9	0.1	6.6
VERNON CREEK	7500	4/28	0	0.0	0.0	5.1
VIPOINT	7670				-	8.0
WEBSTER FLAT	9200	4/25	35	11.6	9.7	16.3
WHITE RIVER #1	8550	4/27	19	6.6	1.3	10.6
WHITE RIVER #3	7400	4/27	0	0.0	0.0	0.8
WIDTSE-ESCALANTE #3	9500	4/26	34	9.6	12.0	10.5
WRIGLEY CREEK	9000	4/26	14	4.6	3.5	9.0
YANKEE RESERVOIR	8700	4/25	20	7.5	5.0	7.3



United States
Department of
Agriculture

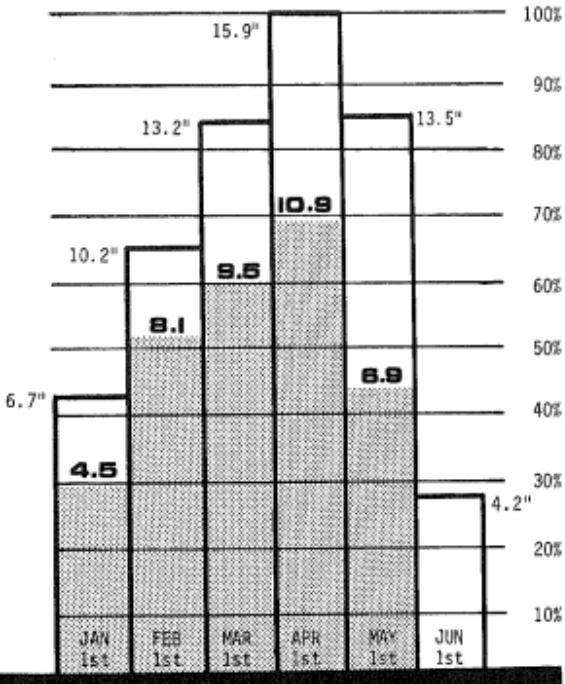
Soil
Conservation
Service

Salt Lake City,
Utah



Utah Snowpack Progress

1988



Statewide

NOTE :

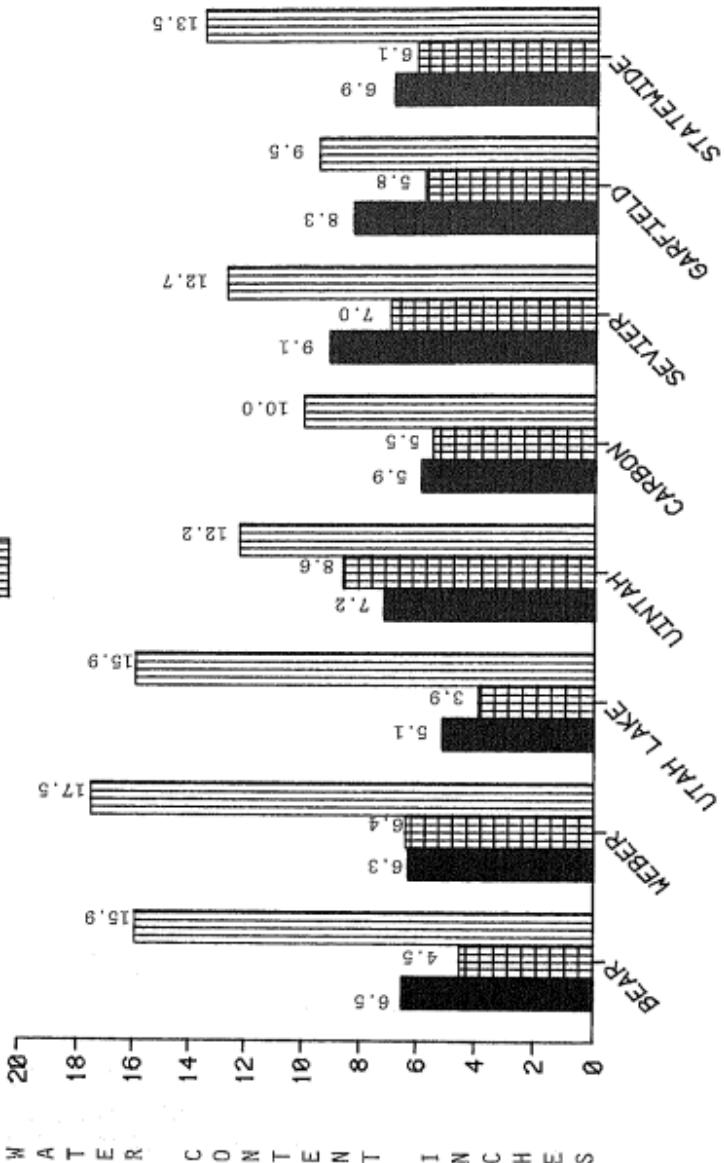
Snow water equivalent in inches is compared to the highest seasonal amount (100%). Monthly averages are accumulated by basin/state.

Averages are for the period 1961-1985.

May 1, 1988

05/01 AVERAGE

05/01/87





**OTHER PLACES FOR INFORMATION
OR ASSISTANCE**

Check with local ASCS office for possible special practices or cost-sharing that might assist with major irrigation changes on your farm this year.

Maintain contact with Farmers Home Administration for special local programs or disaster loans available.

Maintain contact with the local Cooperative Extension Service office for agricultural and marketing conditions.

If you belong to an irrigation district, contact irrigation officials throughout the season to learn about current water availability and water supply forecasts.

Consult commercial irrigation equipment suppliers for system efficiency ideas.

Check with your local Soil Conservation Service office and Conservation District officials for details concerning your soil and water conservation problems.


WATER CONSERVATION

TIPS

**FOR STRETCHING
IRRIGATION WATER**



Stretch Your Irrigation Water

Soil can absorb irrigation water only at a given rate, which varies for each soil type. Water requirements vary for different crops. Make sure you apply water to your crop only when needed. Check soil moisture by space, probe, or soil moisture meter, and make careful visual checks of your crops.

If you have a conservation plan on your farm, or if the soil in your area has been mapped, the Soil Conservation Service can cross-check soil type and irrigation data and provide you with the water holding capacity of your soil for a given crop.

Don't know if your soil has been mapped? Check with the local SCS office. Even if the soil has not been mapped, the SCS can supply you with general information.

Water stretching measures are important to most farmers in the West. To use your available water in the most productive way possible, here's a checklist to help you analyze your irrigation system.

Make sure ditches are clean and free from weeds, sediment, or other debris which can slow water velocity, affect delivery rate and increase evaporation.

Consider lining ditches with concrete or plastic. This could avoid the 10-90 percent loss which often occurs in ditches.

Make sure ditch structures — like headgates, drop structures, and pipe inlets — are strong and functional. A washed-out ditch structure could mean a lot of water lost.

Make sure ditchbanks are firm and not burrowed into by rodents. Rodent holes could cause leakage or failures.

Make sure your pump is operating at peak efficiency. Adequate maintenance will improve efficiency, guard against water loss, and avoid shutdowns.

Inspect your system *before* water starts to flow.

Consider trickle systems for orchards, vineyards, etc. Operate at recommended design values and maintain the filter system.

IRRIGATION MANAGEMENT

Measure the amount of water applied to the field. This can indicate when and how much to irrigate.

Consider alternate row irrigation for crops planted in furrows. But remember to alternate the "alternate" row in later irrigations.

Consider shorter runs if you furrow irrigate. Match stream size and velocity to soil intake rate and capacity.

Consider catching and re-using tail water by pumping it back to the head of the system or re-using elsewhere.

Irrigate most crops when soil moisture reaches about 50 percent of capacity.

SPRINKLER SYSTEMS

Make sure nozzles aren't worn and leaky. Check pipe connections and valves to prevent leaks.

Operate sprinklers at recommended pressure. Use application rate, efficiency factor and time of application to figure how much to apply.



**OTHER PLACES FOR INFORMATION
OR ASSISTANCE**

Consult commercial nursery or garden suppliers for plant watering requirements and recommendations.

Check with your local Soil Conservation Service office, Conservation District officials, or Cooperative Extension Service office for details concerning your water conservation questions.

WATER CONSERVATION

TIPS

FOR STRETCHING

WATER FOR

YARDS AND GARDENS



Surviving a Water Shortage Takes Good Management

What can be done to nurture trees, shrubs, lawns and gardens through a water-short year?

First, try to learn all you can about how much water will be available and what regulations might be put into effect.

Absorb all you can about relationships among soil, water and plants — especially your own.

Develop a plan for applying water based on supply, needs, alternatives and current conditions.

Observe and measure how your plan is working.

Those plant, water and soil relationships are crucial to success of your management plan.

Plants differ in how much water they need to survive or prosper — and this varies with climate and changing weather conditions.

Sprinklers and other devices for applying water vary in how fast they can deliver water.

And finally, soils differ in how fast they absorb moisture, how much they store and how long they retain it.

A rule of thumb says 1 inch of moisture will penetrate 12 inches deep in sandy soil; 7 inches in loam, and 4 to 5 inches in clay.

ALTERNATIVES

For best results check how long it takes to soak the entire root zone and how long this watering will last.

Don't apply water faster than soil can absorb.

Don't let water run off into street or driveway. Water early in the day to reduce evaporation loss.

CONSERVE MOISTURE

Mulch around trees and shrubs and between garden rows. This holds in moisture, discourages weeds which compete for moisture.

Aerate your lawn to permit better water penetration.

Set your lawn mower blade to leave 2 or more inches of grass after mowing.

Fertilize adequately. A sick looking lawn or garden many need more fertilizer, not more water. Apply fertilizer before regular watering.

If it rains, reduce watering time accordingly. Measure how much rain has fallen, adjust watering schedule and duration accordingly.

APPLY WATER EFFICIENTLY

Water deep and less often. Shallow, frequent watering encourages shallow roots, more evaporation loss and reduces the moisture reservoir in the soil.

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State	Utah State University Utah State Department of Natural Resources Division of Wildlife Resources Division of Water Resources Division of Water Rights Bear River Commissioner Price River Commissioner Provo River Commissioner Sevier River Commissioners Spanish Fork River Commissioner Utah Lake and Jordan River Commissioner
Federal	U.S. Department of Agriculture Soil Conservation Service Forest Service U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bureau of Reclamation Geological Survey National Park Service
Municipality	Manti Salt Lake City
Public	Beaver River Water Users Association Board of Canal Presidents - Jordan River Central Utah Conservancy District Emery Canal and Reservoir Company Moan Lake Water Users Association Ogden River Water Users Association Provo River Water Users Association Strawberry Water Users Association Sevier River Water Users Association Weber River Water Users Association Weber Basin Conservancy District
	Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.
	All programs and services of U.S. Dept. of Agriculture are available to everyone without regard to race, creed, color, sex, age, handicap, or national origin.